ADVENTURES IN ARCHAEOLOGY

By John H. Jefferson, C. E., '23

MOUND CITY, OHIO, is not listed in Rand, McNally and Co.'s alphabetical guide to the cities, towns and villages of this commonwealth. A thousand years ago, however, had such a list been compiled, it is quite probable that Mound City—or whatever it may have been called at that time—would have occupied a very prominent place. Unimpressive as it now appears, this place was once an important center of the social, religious, ceremonial—and perhaps commercial—life of the prehistoric inhabitants.

So unimpressive is all that remains of this relic of an ancient race that many of the soldiers of Camp Sherman, who lived on the very site, were unaware of its existence. It is situated on the west bank of the Scioto River about four miles north of Chillicothe. Originally there were twenty-three mounds surrounded by an embankment of earth enclosing approximately thirteen acres, the whole being known as the "Mound City Group." The construction of Camp Sherman destroyed part of several mounds and completely obliterated some of the others. The embankment is still distinguishable in a few places.

While there are over 3500 mounds scattered throughout the state, the writer's interest centers chiefly around this group, for it was here that he gained his first knowledge of archaeology. During the summer of 1921 he was engaged as surveyor for the field exploration party from the Museum of the Ohio State Archaeological and Historical Society. The exploration was supervised by Dr. W. C. Mills, Director, and Mr. H. C. Shetrone, Curator, of the Museum, to whom the writer is indebted for much of his material.

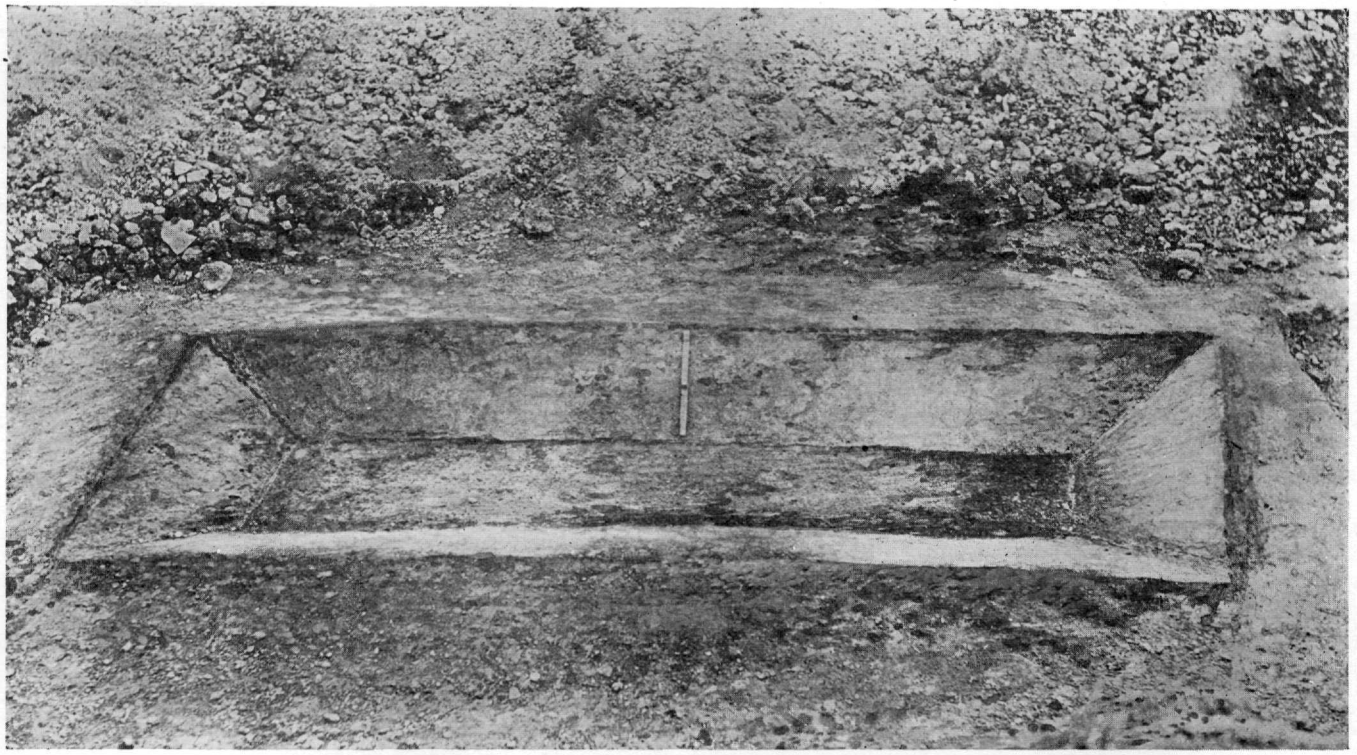
The principal duties of the surveyor were to make surveys of the mounds, keep field notes on the progress of the excavation and prepare the maps and diagrams showing the contents of the mounds as disclosed by excavation. The earth was removed by hand by workmen from Chillicothe and vicinity. The stadia method was employed on most of the surveys but on some the checkerboard method was used. The barracks buildings partly covered some of the mounds. The usual shape is round and the body of the mound dome-shaped.

Indications prove that the mound builders were wide travelers. This was clearly evidenced in the excavation of the graves in the mounds. One grave, particularly, shows the extent of their commerce. This grave, found on the floor of the mound, was rectangular in shape with sides about four and six feet. At each corner and at the midpoint of one side and both ends were large ocean conch shells which were of the type found along the Gulf of Mexico, and which must have been transported from that place. Sheet mica, in pieces of various sizes, were found around the edges and in the center of the burial. The Indians were fond of mica for ornamental purposes and in all probability obtained it from its natural source in North and South Carolina. The body had been cremated, and among the bone fragments and ashes were found small pieces of crystal quartz. These had evidently been an ornament destroyed by the heat of cremation. In this same grave were several pieces of volcanic glass from the Yellowstone Park region. Several fresh water pearls, probably from the Scioto or Ohio rivers were scattered through the cremation. These were of fairly large size and had been perforated, which shows they must have been strung and worn as a necklace. A copper axe was taken from the center of the burial after the cremation had been removed. This was a beautiful specimen. The outside had oxidized to azurite of a bright blue color, which is characteristic of some of the copper objects found in mound excavation. The Indians obtained their copper from the great deposits in the Superior district. Thus in this one grave was represented a commerce extending from the Gulf to the Lakes and from the Ohio River to Yellowstone Park.

The prehistoric Indian had no beast of burden. The first horses were brought to this continent by the early Spanish explorers. However, his canoe furnished a ready means of travel and the activities were greatest along the waterways.

The Mound Builders were a prehistoric people. It is quite probable that the tribes who have left the traces of their activities in Ohio were the ancestors of the Iroquois and Algonquin Indians who were found here by the white man in the seventeenth century. The question then naturally arises: When were the mounds built? This cannnot be answered in any definite number of years, and only an approximate estimation can be made as to how much time has elapsed since the mounds were built. The relics found in mounds in different parts of the state show that different stages had been attained in the development of the people, and that the work was not all done at any one period of time. It is therefore probably safe to say in a general way, that the mounds may date back from 500 years to perhaps 2,000 years or more.

As in the history of any race there are traces of some form of religious worship; so it is with the Indian. All are familiar with the early schoolday stories of the Indians' "Great Spirit" and the "Happy Hunting Ground." Mound excavation gives evidence that the Indians used fire a great deal in their religious ceremony. Charcoal, burned bones, etc., are found scattered throughout the mound, and especially on the floor. The removal of earth usually reveals a number of post holes around the edge of the mound at the floor line. Ordinarily these are easily distinguished, as the post mold will differ in color from the floor and sometimes the holes are hollow. Not infrequently fragments of



By Courtesy of Dr. W. C. Mills, Director of Ohio State Museum.

PLATE I

charred posts are found in the post holes. The logical conclusion is that these posts were the supports for a thatched roof. This crude building then furnished a meeting place for their religious and other ceremonies.

When a chief or some distinguished tribesman died or was killed in battle, his burial was made in a grave prepared on the earth floor of the above mentioned shelter. In most cases the bodies have been cremated and a description of a crematory will be given later in the article. A small primary mound of earth was usually heaped over the burial and sometimes logs were placed around the edges of the graves. When several burials had been made or for some other reason the use of the building was discontinued, it was burned and earth was carried to cover all the burials. The completion of this work left a mound as a lasting monument to the native Americans who lived here.

The building of the mound required much labor, as it was of course all done by hand. Near some earthworks there are depressions or "borrow pits," from which the earth for the mound was taken. It was probably carried in wicker baskets or in deer skins and the amount carried in one trip would be about a peck in our measure. In some mounds a vertical cut discloses just how much one laborer carried. Here would be a deposit of black earth while adjacent to it would be clay, sand, or earth of some other color; the texture of the different soils showing very plainly that the mound was the work of man and not a natural knoll or hill.

The construction of a mound may have been completed in one season or may have extended over several seasons. An arched layer of sand or gravel through the mound sometimes indicates that the building operation was suspended for a time and later completed. A mound is a sign of prosperity of the people at the time it was built and is also an indication of large numbers of laborers. It can be seen that to carry enough earth by hand for some of the larger mounds was a huge undertaking. Therefore, we may conclude that these people were for the most part peaceful and prosperous, else their time would have been more largely taken up in conflict with their neighbors and providing means of livelihood.

As is suggested by its name, a crematory is a basin in which the bodies of the dead were cremated preparatory to burial. Crematory basins are made of fine puddled clay. They are nearly always rectangular in shape and the usual size is about four by six feet. However, they are sometimes found larger and in other cases smaller. The top edges are ordinarily on the same level with the floor of the mound. The depth of the basin varies from four to six inches. The lines are well defined, the sides sloping to the bottom, which is smooth and level. The depth to which the earth surrounding the crematory is burned shows evidence of long-continued use. Quite frequently fragments of charred human remains are found in the crematory. Occasionally they were used as depositories for the cremated bodies. Plate I shows a crematory which had been used for this purpose.

The Indian had only such implements as he could make from the material at hand. His first weapons were stones and clubs. Then he learned that a sharp edge was an improvement over the ordinary stone. This led to the discovery that flint could be made into useful cutting tools if properly chipped. Flint Ridge, between Newark and Zanesville, has a very fine deposit of this material. The Indians came from long distances to get this mineral for their arrow heads, spear heads, knives, scrapers, etc. A depression in a rock and a long round stone

of small diameter, known respectively as mortar and pestle, furnished the "mill" for grinding corn. All have doubtless seen stone hatchets or "tomahawks," which were useful for so many purposes. They also used implements made of bone. The legbone of a deer could be fashioned into a scraper which crudely resembles a carpenter's draw knife. From a turkey legbone a sharp pointed awl could be made. This could be used for making garments from animal skins. Needles, fishhooks and other articles were also made of bone. The tip of a deer antler furnished a good point for a weapon, and the antler of an elk could be made into a digging tool. A very good hoe was made by using a mussel shell to which a handle was attached. These shells were also useful as spoons. So we see that the Indian made practical use of the materials which Nature furnished; catching the fish summer of 1921, following the completion of the work at Mound City. This vessel had been broken into many pieces but was restored by Mr. H. C. Shetrone, Curator of the Museum, and is now on display in the Museum.

Of the many relics found in the 1921 season at Mound City and the following season at the Hopewell Group, in Ross County, Ohio, only a few can be mentioned here. Plate II shows a few of the famous ceremonial pipes. These are of the platform type and are made of the famous Ohio pipestone. Several hundred pipes of similar workmanship have been taken from Ohio mounds. These sculptures depict practically every form of wild animal and bird life native to Ohio.

Many ornaments were made of copper cut in effigies of various forms. Also many axes of this

By Courtesy of Dr. W. C. Mills, Director of the Ohio State Museum.

PLATE II

CEREMONIAL PLATFORM PIPES: SQUIRREL, OWL, HAWK, BAYING INDIAN DOG AND RACOON

which were plentiful in the streams, killing the game which abounded in the forest and tilling the soil to grow the maize or Indian corn.

Pottery is found in many mounds and village sites. It is made of clay and is cemented together by finely broken pieces of mussel shell. The color varies from black to a reddish brown, depending largely perhaps on the quality of the clay and the firing period. The vessels are in various sizes and some specimens of several gallons capacity have been found. Some of the pottery is plain and some is very beautifully decorated with handles attached. The largest specimen ever found in this state was unearthed by our party near Hamilton, Ohio, in the material are found. Thousands of freshwater pearls and shell beads were taken from the Hopewell Group. A necklace of bear tusks was also found there last summer. The beautifully worked spearheads of obsidian are worthy of admiration.

A small crematory was removed from one of the Hopewell Mounds last fall and is now in the Museum. Work on the Hopewell Group will be resumed by the Museum early in the summer and it is expected that many valuable finds will be made. Everyone cannot witness the excavation of Indian mounds, but all can visit the Museum, which is at all times open to the public and contains all the relics found in the field explorations.